

2006 ABSTRACTS

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Valpo CORE Reader

Jim Beasley, Editor

Valpo CORE Reader features some of the best writing done from the previous year, highlights models of the kinds of writing students will be doing in the current year, and perhaps most importantly, invites additional ways of thinking about our texts.

The idea of research is closely related to one of the best aspects of a portfolio writing course--its emphasis on revision. Revision, like research, implies work over time, and most of time, "seeing again" and "searching again" takes place through dialogues with others. One of the larger papers which involves both re-searching and re-visioning is the "worker profile," an ambitious paper in the second semester involving interviews and contextual framing.

You might notice that many of these essays address the idea of vocation or calling in the lives of the authors or their subjects. It is intentional. We have been given permission to devote some serious thinking about the spiritual world of vocation

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and how first-year students think about their place in that world. We are grateful to participate in the Celebration of Undergraduate Scholarship.

Contributing Authors:

Myranda Bellman, Eric Brooks, Cassie Carbaugh, Bill Celorio, Jackie Fuller, Bret Hassler, Sonia Hernandez, Ryan Perri, Emily Peters, Leah Ramey, Katy Ross, Drew Saad, Jen Stolle

Rape & Sexual Assault: Beliefs & Behaviors

Sarah Adam, Sarah Kramer

Departmental Affiliation: Social Work, College of Arts and Sciences

While there is a wealth of information and research about rape and sexual assault, reported numbers of rapes and the actual believed prevalence of rape differ greatly. In the Valparaiso University community, little is known about how frequently date rape or other forms of sexual violence occur. This research project assesses the attitudes and behaviors of female subjects from Valparaiso University with regards to rape and sexual assault. It also reveals subjects' opinions about ways to improve educational programs on the Valparaiso University campus. The research reveals whether subjects' beliefs about rape and sexual assault correlate with their behaviors, as well as how different the beliefs and behaviors of women who have been raped are from the beliefs and behaviors of women who have not been raped. The findings are based on survey data collected from women who attend Valparaiso University. This presentation will contain discussion of the relationship between attitudes about rape and sexual assault to behaviors that women participate in, as well as an examination of which factors are most closely associated with rape and sexual assault. It will also discuss the differences between responses of women who have experienced rape or sexual assault and the responses of women who have not.

Information about the Authors:

Sarah Kramer and Sarah Adam are junior social work majors. Sarah Kramer hails from Missouri and has a minor in urban studies while Sarah Adam is from Illinois and has a minor in sociology. Both are members of the Student Social Work Organization and of the Social Work Honors Society. They are completing this project for their social work 330 class, Introduction to Methods of Social Research.

They became interested in the topic of rape and sexual assault last semester because of the reported attacks on several women on the Valparaiso University campus. After discussing these attacks in a social work class, they decided they wanted to learn more about the reported sexual assaults and rapes on campus. They also wanted to find out what women believed about rape and sexual assault and how these beliefs shaped their behaviors.

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Graphically-Based Kinematics for the Mathematically Unsophisticated and Challenging Student: Misconceptions with Newton's Laws

Ralph Asher

Departmental Affiliation: Physics,
College of Arts and Sciences

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Diagnostic exams of introductory physics students have shown that the majority of students hold fundamentally inaccurate perceptions of Newton's Laws. A fundamental misunderstanding of velocity and acceleration becomes evident in student responses on multiple-choice questions regarding Newton's Second Law, $\#F = dp/dt$, or as it is typically presented in introductory physics, $\#F = ma$ for constant mass. Diagnostic exams also suggest a fundamental misunderstanding of Newton's First and Third Laws. My goal is to develop modules suitable for use in an introductory physics course that help clarify Newton's Laws. I will also demonstrate their effectiveness by deploying them in the Christ College course, CC-270, Interpretation in the Natural Sciences, and using pre- and post-diagnostic exam questions.

Information about the Author:

Ralph Asher is a senior physics major from Valparaiso, IN.

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Risk Communication for Signing a Recording Artist

Amanda Bate, Lindsey Opsahl

Departmental Affiliation: Communication,
College of Arts and Sciences

There are several risks when signing a new artist to a label such as the image, songs and personal life of the artist, as well as the reception by fans and touring to worry about. Labels have to consider risks when signing all artists and the effect they will have on the label. The purpose of this project is to take a closer look at who they are signing and what effects there will be on all parties that are involved. Some key questions that need to be answered are: do record companies weight the pros and cons of signing or is it based on talent alone? Also, how much emphasis is placed on the image of the artists? The Risk Communication Theory helps us to understand the amount of communication that all parties must take part in. We came about our research through interviews with those that are involved in the music industry from artists, presidents of companies, and artists that also own their own company. Our main findings are that where there is talent, there is a contract waiting; the pros and cons are not considered. There is an understanding that whatever problems that arise will be dealt with when they happen. Our findings show that talent alone will produce enough backing from a record company that there is no need to worry about what the artist may bring to the company's image. A more evident use of the Risk Communication theory when signing a new artist to a label would benefit the company in the future.

Information about the Authors:

Amanda is interested in risk communication in the music industry because she someday hopes to work for a record company. She has previous experience with working for No Deal Records in Detroit as well

as Great Media Detroit Radio doing promotion. In the future, Amanda hopes to work for a record company in the rock department as head of promotion. Lindsey also has an interest in the music industry. She currently is working for an ad agency, Response TV Network, in Philadelphia. Lindsey and Amanda have taken two public relations courses where many theories have been discussed about

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the PR field. Just like Amanda, Lindsey aspires to work for a record label doing promotions for talent.

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Conflict or Compromise: The United Nations, the United States, and Negotiating the Decision to Invade Iraq

Sarah Benczik

Departmental Affiliation: Christ College

The U.S. decision to invade Iraq was fraught with controversy. Despite severe criticism both internationally and domestically, the Bush administration and U.S. government made the decision to go to war. Was there something else that could have been said or done by the U.S. government to convince other U.N. Member States to accept the U.S. plan? Roger Fisher and William Ury's book, "Getting to Yes," conveys methods of negotiation that have been studied by the Harvard Negotiation Project for the last twenty years. The Harvard Negotiation Project studies negotiation and conflict resolution at domestic, business, and international levels. Could the U.S. government have used these negotiation methods at the United Nations to plead their case? What methods of negotiation were used? This paper examines the nature of U.S. foreign policy in international politics and why States have such a hard time compromising with one another. Looking closer at the United Nations, an international organization that provides a forum for negotiation and compromise, this paper highlights basic U.N. principles that parallel methods set forth in "Getting to Yes," and addresses whether or not the U.S. actually ought to compromise with other countries in current international fora.

Information about the Author:

Sarah Benczik is a sophomore international affairs, public relations, and humanities major from Plymouth, IN. She is returning to VU after completing an internship at the U.S. State Department Office of UN Political Affairs in Washington, DC. Sarah intends to pursue graduate work and a law degree when she graduates in May 2007.

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Chinese Perceptions of Japanese People and Government

Bethany Birch

Departmental Affiliation: Chinese and Japanese Studies, College of Arts and Sciences

This research was done over summer-fall 2005 in Hangzhou, China, where 107 surveys were collected and 10 interviews were completed as well as 8 months of observation. This research examined the role of several different factors in the Chinese perceptions of Japanese government and individuals including media, schooling, personal contact, etc. By understanding the stereotypes and trends in China regarding Japan, it makes the task of disabling those stereotypes surmountable. The goal of this paper is to help people see the existing sociological reasons for the current relations between the Chinese and Japanese and possible ways to enhance this interaction. This relationship is important to the United States

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as both countries are trade powers. If we are to have effective diplomacy in East Asia, it is vital we understand regional issues between China and Japan.

Information about the Author:

Bethany Birch is currently a senior and will graduate this spring. She has been to China three times and has spent a total of nine months in the country. She will pursue the Masters of Arts Chinese Studies degree at Valpo this summer.

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Biocatalytic Synthesis of Chiral Lactones

Rebecca Bock

Departmental Affiliation: Chemistry,

College of Arts and Sciences

Biocatalytic synthesis is a “green” (energy-efficient and environmentally-friendly) alternative to traditional chemical synthesis. The work reported here is part of an ongoing collaborative effort to develop a biocatalytic synthesis of optically pure chiral lactones from racemic hydroxyamides. The specific goal for the work reported here is to use genetic engineering to prepare an E.coli clone that expresses a His-tagged amidase enzyme. Our experimental strategy is to: 1) use the polymerase chain reaction (PCR) to make a variant of the amidase gene flanked on both sides with recombination-recognition sequences, 2) use a phage recombination reaction to insert the amidase gene into a plasmid that also contains the genetic code for 6 histidines, and 3) transform E.coli with this plasmid to prepare a clone that will express the His-tagged amidase. To date, we have succeeded in the PCR reaction and have attempted the recombination/transformation experiment with ambiguous results.

Information about the Author:

Becky is a junior Chemistry major, with a Liberal Arts Business minor. She is planning on pursuing her chemistry and business interests by going into the business side of chemistry, possibly pharmaceutical sales. She is a member of the Gamma Phi Beta sorority, Mortar Board, the VOV Committee, Alpha Lambda Delta, Intramural Advisory Committee, and the Chemistry Club. Her research took place over this past summer with the great advice of Dr. Goyne.

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Urinary Incontinence in the Elderly

Julie Bolgert, Danessa DeLaCruz, Melissa Johnson, Amanda Jurek, Kristen Mueller

Departmental Affiliation: Nursing,

College of Nursing

This project examines the best practice concerning urinary incontinence in elderly patients residing in long-term care facility. Urinary incontinence is a rising problem resulting in falls, hospitalizations, pressure sores, and urinary tract infections.

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By creating a urinary incontinence program unique to each resident's needs, the elderly will be less prone to urinary incontinence. Six Valparaiso University nursing students completed the research project. Books, articles, and nursing journals were retrieved through Pre-CINHAL, CINHAL, and EBSCOhost using key data terms such as elderly UI, long-term care facility, UI interventions, and managing UI. Group members evaluated articles for relevance and effectiveness to determine inclusion in the review. A new policy was created after reviewing the research articles, quality improvement plans, case studies, and protocols. This policy states that all residents should be assessed for urinary incontinence to create a plan of care tailored to meet each resident's needs. Continence status and treatment plan should be reevaluated monthly. To evaluate the effectiveness of the protocols, it is proposed to review residents, gather information over one week, and create an individualized plan. Success is measured by monthly reduction in incontinence. Yearly staff development training will ensure that barriers to incontinence care are addressed.

Information about the Authors:

Six senior nursing students from Valparaiso University completed this research project. They are committed to evidenced-based practice when caring for their patients. The success of this project would not have been possible without the guidance and encouragement of Dr. Nola Schmidt.

Faculty Sponsor: Nola Schmidt

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Internal Communications: Comparing Employee Relations Programs Across Industries

Heather Bradford, John Schaekel

Departmental Affiliation: Communication,
College of Arts and Sciences

Public relations internal responsibilities include the relationship between administration and employees in an organization (Hendrix 2004). However, internal relations challenges may vary between industries. For example, employee relations may have different priorities within a sports organization in comparison to a large corporation. To view this from a relationship management theory approach, a series of instruments, questionnaires, and interviews were conducted to assess the quality and kind of relationship in each environment. The results indicated that there are more similarities than differences. The data also suggested that the communication quality is essential to the internal satisfaction level. The future importance of this finding suggests that there can be generalized internal communication procedures and that the quality of the internal organizational experience is tied closely to the significance of the public relations role.

Information about the Authors:

In the process of managing and creating a new business, Heather Bradford has experienced the importance of sustaining proper internal communication within an organization. Her educational background includes a public relations major and business minor. She is developing, designing, and managing a new cafe business opening in March 2006 at VU Law School. John Schaekel had an internship for a

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high school athletic department. His educational background a sports management major, business and coaching minor.

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Valpo Voicemail: A Mystery to be Solved

Tony Camacho, Martha Afdahl

Departmental Affiliation: Communication,
College of Arts and Sciences

Approximately two years ago, Valparaiso University set up a new voicemail system with more advance features such as a Call Pilot messaging platform for voicemail service as well as an enhanced 911 system used to route emergency calls. Since the change, students are required to activate their own individual voicemail accounts. Even though this new system may be a step forward in technological use on campus, many students instead, think this is a step back. The absence of student voicemail setup is causing communication issues between faculty and students, leaving the faculty with limited options, including email as well as long distance calls via cell phones. Electronic survey research software was utilized to contact students about the issue. The results were to answer the following questions: Is it a technical glitch, unclear directions, or simply a lack of effort from the students?

Information about the Authors:

Tony Camacho (junior) and Martha Afdahl (senior) are members of the VU Internal Communication Committee and also members of the PRSSA student agency--SPARK PR.

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Prostate Cancer Screening in African American Men

Sarah Chapman, Evaleen Fleck, Tasha Gyure, Stacy Monnier, Heidi Singleton, Lisa Swanson

Departmental Affiliation: Nursing,
College of Nursing

This research project addresses how the use of screening for prostate cancer in African American men can be increased. Prostate cancer is the leading cancer in men. It is about 3.5 times higher among black men than Asian/Pacific Islander men. Students searched CINAHL for related articles, which were critiqued by two group members and chosen based on their applicability to the research question. The most popular sample used among the research articles was a convenience sample focusing on African American men. The most common design was a questionnaire. The universal finding throughout the articles was that African American men have barriers preventing them from getting screened for prostate cancer. After reviewing the research articles, it was decided to increase screenings by offering educational outreach programs specifically addressing what happens during the screening procedure, how the disease progresses, and why it is a priority. It was decided that it is important to have educational outreach

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programs, with a multidisciplinary approach, held at convenient locations employing community leaders as spokespeople. Effectiveness of the educational programs to increase screening can be evaluated for effectiveness using surveys, reported increase in incidence of prostate cancer screenings, and knowledge tests.

Information about the Authors:

This group consists of two accelerated and four senior nursing students looking to make a difference in the nursing field through improving patient care.

Faculty Sponsor: Nola Schmidt

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Drunk Driving: Behaviors and Attitudes of College Students

Rachel Christiansen, Kelly Halcarz, Carissa Redeker

Departmental Affiliation: Social Work,

College of Arts and Sciences

While drunk driving has negative consequences, it is still a prominent issue among college students in the United States. There is a social stigma attached to the term “drunk driving” yet, especially among college students, it is a common if not socially acceptable behavior. The study examines the attitudes of students on the campus of Valparaiso University by determining what students define as drunk driving and by questioning their beliefs about its appeal. By exploring students’ behaviors, such as driving while intoxicated and riding with intoxicated drivers, the study seeks to analyze the correlations between the aforementioned attitudes and behaviors. In addition, the study explores whether students’ behaviors and/or attitudes have ever changed due to a significant event such as an alcohol-related accident or other incident.

Information about the Authors:

Rachel is a junior with social work and Spanish majors from Saint Louis, MO. She is enthusiastic to expand her horizons with this research project. While she has participated in many different aspects of social work, the topic of drunk driving seems particularly exciting and relevant to her life as a college student. Kelly, a junior social work major from Merrillville, IN, has been personally impacted by the effects of drunk driving. With this background, she hopes this research project will bring greater awareness of the problem of drunk driving to college students.

Carissa is a junior with social work and Spanish majors from Morton, IL. She sees the societal influences that place pressure on college students to drink and is interested in studying the topic of drinking and driving and how students’ attitudes correlate with their actual behaviors.

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High Temperature Electrolysis of Zinc from Zinc Oxide

Kim Christman

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The purpose of this research project is to determine the relationship of high temperatures to the efficiency of electrochemical reactions used to produce Zinc fuel for fuel cells. The key to ascertaining the feasibility of producing fuels in

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this manner is the resistance of the chemical solution to the flow of electricity. In determining this resistance, one can find the relative effectiveness of various solutions over a range of temperatures. This effectiveness is essentially the amount of electricity required to create the reaction versus the amount of Zinc fuel produced. In electrolysis, Zinc oxide reacts with electricity to separate the two atoms. In future applications, solar radiation will be used to increase the temperature at which the reaction takes place. At higher temperatures, less electricity is needed to energize the reaction making it more energy efficient. In the 1980's this was the focus of researchers at the University of Minnesota (U of M). Work there was completed up to a temperature of 1675 K (2555° F). The research at Valparaiso University will build upon that done at the U of M by continuing to temperatures up to 1800K (2780° F).

Information about the Author:

Kim Christman is a senior in the mechanical engineering department. She is continuing her research on high temperature electrolysis on campus during the summer months before pursuing a Ph.D. in Mechanical Engineering focusing on energy conversion and thermal fluids.

Faculty Sponsor: Robert Palumbo

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Exploration of a Second Approach to Generally Accepted Accounting Principles
Julia Colbert, Jessica Haugen, Kirsten Huth, Joel Troxel

Departmental Affiliation: Accounting,

College of Business Administration

This piece addresses the need for a second approach to the Generally Accepted Accounting Principles (GAAP) to reflect the financial reporting needs of public, private, large and small companies. Currently, GAAP is promulgated by the Financial Accounting Standards Board (FASB) and mandated for all public companies by the Securities and Exchange Committee. Essentially, all public companies are required by law to follow GAAP, and private companies may elect to follow it. Many choose not to because GAAP is geared toward public company financial reporting. In this piece, we recommend that the distinction for a second approach to GAAP should be based on the distinction between private and public companies. In formulating our recommendation, we address the needs and issues related to creating a second approach to GAAP, while also keeping in mind how this will affect the accounting profession. Our conclusion also takes into account the complex and dynamic needs of today's marketplace and the reporting needs of many companies, both public and private, while accounting for the current initiative of the FASB to begin convergence with the International Accounting Standards Board's generally accepted accounting principles due to the increasingly global marketplace in which we engage.

Information about the Authors:

Valparaiso University Case Competition Team members are senior accounting and music major Julia Colbert of Sarasota, FL; senior accounting and finance major Jessica Haugen of Owatonna, MN; senior accounting major Kirsten Huth of Rubicon, WI; and senior accounting major Joel Troxel of Hanna, IN. Members of the team were selected by accounting faculty for their academic interest

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in the field of accounting. Both Colbert and Troxel participated in the Case Competition in 2004. Colbert and Huth will be graduating in May 2006 and will be pursuing careers in public accounting with KPMG, while Haugen and Troxel will be graduating in December 2006 and have internships in public accounting this summer with BKD and Crowe Chizek, respectively.

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Isolation and Characterization of Metal-Reducing Enzymes from Shewanella Algae BrY

Miriam Conces

Departmental Affiliation: Chemistry,

College of Arts and Sciences

This project is a small part of a huge research effort that is directed at the goal of more efficiently managing contaminated soil and groundwater at Department of Energy (DOE) sites scattered across the United States. Our specific area of interest is the use of microbes to facilitate the chemical reduction of actinide metal ions (uranium, plutonium, etc.) and thereby render these ions less soluble in water. By decreasing their solubility, these ions will be less mobile. Our specific goal in this project is to isolate and characterize the metal-reducing enzymes from the bacterium Shewanella algae BrY. Our strategy is to first find, and sequence, the genes which code for the metal-reducing enzymes and then to isolate and characterize the enzymes themselves.

Information about the Author:

Miriam Conces is a senior biochemistry major from Zionsville, IN.

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The Benefits of Undergraduate Research at the College of Nursing

Sarah Cottrell, Liz Eischer, Katie Gordon

Departmental Affiliation: Nursing,

College of Nursing

Undergraduate research has been an ongoing process at Valparaiso University in the College of Nursing. For the past eight years, undergraduate research students have been involved in research at the Hilltop Community Health Center. Most recently, the researchers examined the relationships among lifestyles, health behaviors, and health-related quality for underserved and uninsured adults seen at a nurse-managed center. Student involvement included collecting surveys, conducting chart audits, completing literature searches, and developing health education materials for the health center. The research was presented at various conferences, including Sigma Theta Tau International, the honor society for nursing. Because of limited opportunities for undergraduate research in nursing, this current study was conducted to determine the perceived benefits of participating in an undergraduate research group. A survey asked past participants various questions about their experiences in undergraduate research. Questions on the survey reflected the work the students did in the group, involvement in

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research post-baccalaureate graduation, and the benefits gained from experiences in undergraduate nursing research. The data from the surveys were analyzed for any trends and correlations. These findings were compared to other publications on undergraduate involvement in research.

Information about the Authors:

Sarah Cottrell is a junior nursing student from Washington, DC. She is on a Navy scholarship and would like to pursue a career as a nurse anesthetist. Liz Eischer is a senior nursing student from St. Louis MO. After graduation in May, she is looking forward to a career in pediatric nursing. Katie Gordon is a sophomore nursing student from Plymouth, IN. She is also a pre-med student.

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Water Quality Research in the Valparaiso Chain of Lakes Watershed

Ashley Coulter, Jessica Recchia

Departmental Affiliation: Chemistry,

College of Arts and Sciences

Forty sites distributed among eleven lakes and two streams in the Valparaiso Chain of Lakes watershed were tested for a variety of water quality parameters four times during the summer of 2005. Among the parameters monitored were pH, conductivity, phosphate concentration, nitrate concentration, surface temperature, clarity, total solids, E. coli, fecal coliforms, manganese, and dissolved oxygen. Our results indicated that except for some high nitrate levels, in general, the watershed is relatively healthy in terms of the chemical and physical parameters monitored when compared with historical levels. The abnormally hot and dry summer did adversely affect the smaller lakes, as exemplified by depressed dissolved oxygen and water clarity readings, more than the larger lakes. Additional testing will be completed quarterly during the coming year and will continue regularly in the future. To assist with long-term planning and to assess the impact of water quality improvement efforts in the watershed, the results of this project were shared with multiple groups with vested interests. These groups included the Valparaiso Lakes Area Conservancy District/LAC Utilities, the Valparaiso Chain of Lakes Watershed Group, and the City of Valparaiso Department of Parks and Recreation.

Information about the Authors:

Ashley Coulter is a junior chemistry major from Wheatfield, IN. She is interested in environmental issues and pursuing a career in either environmental chemistry or crime lab research. Jessica Recchia is a sophomore biology major from Chesterton, IN. She is currently in the pre-med program and plans on attending medical school after graduation.

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Does PKC-beta II Modulates Caco-2 Cell Growth?

Erica Dahlmeier, Hadie Rifai, Lynnae Skogerboe

Departmental Affiliation: Biology,

College of Arts and Sciences

Colon cancer is a leading cause of death in our society and is incurable in about one-half of patients found with this malignancy. Elucidating any path to malignancy will afford researchers and clinicians insight into preventative measures as well as potential cures. Studies in colon cancer indicate that the molecule Protein Kinase C beta II is over-expressed and more active in tumor tissue vs. tissue collected from nearby non-tumor tissue in colon carcinomas. Protein Kinase C is known to interact with a number of other proteins to cause production of growth factors or other proteins which regulate cell growth and/or programmed cell death (apoptosis). Our laboratory seeks to answer the following questions:

1. Is the increased expression of Protein Kinase C beta II a causative step in tumor formation?
2. Are the phosphorylation events that Protein Kinase C participates in (kinase activity) necessary for the role of Protein Kinase C beta II in tumorigenesis?

To answer these questions, we are in the process of preparing tissue culture cell lines which have lesser expression of PKC beta 2. Subsequent to this preparation, we will assess these cell lines for hallmarks of tumorigenesis-cell growth, invasiveness, and ability to evade apoptosis.

Information about the Authors:

Erica Dahlmeier is a senior majoring in biology. Hadie Rifai is a junior double majoring in biology and chemistry. Lynnae Skogerboe is a senior majoring in biochemistry.

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Image Restoration and Sports: How Public Relations Strategies Are Critical to the Individual and the Organization

Ryan Dean, Jill Lyons

Departmental Affiliation: Communication,
College of Arts and Sciences

In sports, a player's reputation can be damaged by his/her actions, or by outside forces manipulating the situation. This person, in order to regain his reputable standing, must turn to a support system to achieve this. This support system is public relations. Public Relations constantly work at promoting and improving the images of prominent faces, and this is done through strategy and careful planning. Examples of successful public relations strategies through image restoration were found with Internet research, article databases, and student surveys. We discovered the tools that public relations utilize to make it one of the fastest-growing mediums. Sports figures, in the future, will continue to turn to public relation specialists to assess and provide the essential correction factors.

Media has always had a large impact on how the public views individuals, namely popular sports figures. With the information available, we found that this topic and image restoration theory were an area with extensive research and applicable to this issue. Our project examines case studies and the use of public relations strategies. Specific public relations approaches are identified and organized into an overall schematic to further understand the process involved.

Information about the Authors:

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Ryan Dean is a sports management and business administration/public relations double minor. Ryan has been director of public relations for IFC and holds an internship with the Gary Railcats. He intends to pursue sports marketing after college. Jill Lyons is a sophomore public relations and English double major. Jill is currently an active member of the Public Relations Student Society of America (PRSSA) and is interested in the agency side of PR.

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A Researched-Based Campaign for Organizational Awareness

Jesse Gerhardt, Erik Wielgos, Katie Deater

Departmental Affiliation: Communication,

College of Arts and Sciences

Global awareness is most importantly brought to campus through the presence of the international student. Although the United States now has only around 50,000 international students, such countries as Australia has three times as many enrolled. This study examines the involvement of Valparaiso University students in the international organization on campus--VISA. The VISA dinner participants were surveyed after each dinner performance. The results established the event was very well liked. However, the student representation remains low. The purpose of this project was to utilize the research results to design a campaign to bring more students into the annual dinner celebration.

Information about the Authors:

Jesse Gerhardt, Erik Wielgos, and Katie Deater are members of the PRSSA student agency--SPARK PR. This project is one of the clients of the student agency, and the student team is composed of public relations majors.

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The Use of Public Relations in High Profile/Celebrity Image Restoration Cases

Kevin Grimoldby, Caitlin Hart

Departmental Affiliation: Communication/PR, College of Arts and Sciences

Getting a better understanding of image restoration and its importance in the public eye and learning how public relations has aided in the elimination of negative celebrity image are the purposes of the project. Image restoration is the method used to improve a client's reputation and public's perception of such client. Having a public relations professional who knows how to use the Image Restoration Theory ensures the client that his/her reputation is in capable and reliable hands.

From the use of interviews, surveys, and questionnaires, it is shown that this theory, if used properly and hastily by professionals, can improve a client's image greatly.

Information about the Authors:

Kevin is a junior sports management major and communication and business minor. His current goals and aspirations are to graduate and find a position with a professional athletics team and eventually run the day-to-day operations of such an organization. Caitlin is a senior public relations major. She is intrigued

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by how celebrity status can change because of PR. Her goal is to pursue a career in public relations-event planning, celebrity and high profile PR, or public relations/advertising.

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A Causal Analysis of Ectodermal Epiboly in Amphibian Gastrulation

Timothy Hadley, Brent Penque, Shaun Hautly

Departmental Affiliation: Biology,
College of Arts and Sciences

During amphibian gastrulation, the top (animal) half of the embryo spreads to cover the bottom (vegetal) half of the embryo. This spreading action (epiboly) is carried out by cellular rearrangement and elongation, not growth. The spreading tissue (ectoderm) initially consists of a single cell layer of epithelium and a multi-layer of mesenchymal cells beneath. During spreading, mesenchymal cells do not enter the epithelium and epithelium cells do not enter the mesenchyme. The mesenchyme cells do, however, rearrange, changing that layer from approximately four cells thick to one cell thick. Meanwhile, the epithelial cells stretch. The driving forces for epiboly must be either within the ectoderm itself (autonomous epiboly) or be applied from outside (non-autonomous epiboly). Autonomous epiboly has never been demonstrated in excised ectoderm; however, negative evidence for autonomous epiboly does not disprove it. SEM evidence presented here shows that excised ectoderm from gastrulating *Xenopus laevis* embryos, allowed to round up and compressed with an externally applied force, responded with normal epiboly activity, i.e., epithelial stretching and mesenchymal rearrangement, mimicking normal behavior in the intact embryo. This constitutes the first affirmative evidence for non-autonomous epiboly.

Information about the Authors:

Timothy Hadley, a senior biology major, is from the wonderful state of Wisconsin. He plans on doing clinical research after graduation. Shaun Hautly, a junior biology major, is from St. Louis, MO. He intends to pursue computer programming and the technology of biological computer interfaces. Brent Penque, a junior biology and chemistry double major, is originally from MN. He would like to pursue a career in internal medicine or neurology.

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Shanghai Urban Planning: Better City, Better Life?

Jared Hahn

Departmental Affiliation: Department of Geography, College of Arts and Sciences

An examination of the comprehensive Urban Plan for greater Shanghai including World Expo 2010 is presented. Marking the birthday of both China and Shanghai, will the plan live up to the standards of a first world country China projects itself to be? Or are there other problems inherent in China's totalitarian approach to urban planning?

Information about the Author:

Office of Sponsored and Undergraduate Research - Valparaiso University
Jared Hahn is a senior geography and Chinese/Japanese studies major specializing in contemporary issues in Chinese and communication geography.

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Crisis Communication: The Growing Trend with a Strong Impact

Meagen Hanlon, Colette Mancini

Departmental Affiliation: Communication,
College of Arts and Sciences

The increased interest in crisis communication by nonprofit, corporate, and public relations agencies is a growing trend within the United States. Organizations, especially mid-sized organizations, are usually not prepared for crises (only 20% of organizations have a crisis plan after 911). The growing need for crisis communication plans is the impetus for this study.

There are several questions of interest. For example, 1) How many organizations have crisis communication plans? 2) How have they helped/benefited the organization? 3) Why is crisis communication becoming such a popular trend, especially for large corporations? and 4) Why aren't mid-sized and smaller organizations getting in on the trend?

Using the Situation Crisis Communication Theory, data from personal interviews, surveys, and focus groups with business owners was analyzed. The themes in these discussions reveal a lack of understanding about crisis communication plans and yet suggest many organizations are eager for assistance on this matter. Hopefully, the outcome of this study will be guidelines for organizations who are considering developing a crisis communication plan for their organization.

Information about the Authors:

Meagen, a public relations major and business minor, has held two internship positions that both required her to either develop crisis communication plans or research crisis situations. She would like to work in an established PR agency that specializes in crises communication. Colette Mancini, a public relations and education double major, has an interest in crisis communication and is interested in studying the role of public relations in educational institutions.

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Professional Public Relations Associations: The Impact on Public Relations Careers

Meagen Hanlon for 490/590--PR Research Seminar

Departmental Affiliation: Communication,
College of Arts and Sciences

The Public Relations Student Society of America (PRSSA) and the parent Public Relations Society of America (PRSA) involves over 30,000 practitioners, academics and students in a network of ongoing communication. This study focused on the offerings for each organization and its impact upon their populations and the impact of these associations as one's career progresses. The interviews and research established 1) those involved could cite benefits, 2) there is respect for those

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who contributed through association work, and 3) the growth of the field and the responsibilities of the field are greatly reflected by the training, conferences, and seminars offered by these professional groups.

Information about the Authors:

The thirteen members of the Public Relations Seminar class involved majors/minors that have extensive coursework and experience in public relations (internship, PRSSA-Spark PR Agency). The contributors include: Laura Arloszynski, Joanna Bender, Brian Boline, Heather Bradford, Luis Camacho, Rachel Cooper, Stephanie Elzey, Jaclyn Fuller, Zachary Golden, Meagen Hanlon, Caitlin, Hart, Taneta McCaw, and Kari Murphy.

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Hail Warning Decision Guidance

Michelle Harrold

Departmental Affiliation: Geography and Meteorology, College of Arts and Sciences

National Weather Service (NWS) forecasters will have several new hail diagnostic attributes available to them in Advanced Weather Information Processing System.

In a warning decision environment, it is essential that forecasters have the best guidance available to them. The purpose of this study is to compare these new hail diagnostic parameters with legacy parameters to determine which are the “best predictors” for hail warning guidance. This study is the first step in developing official NWS Hail Warning Guidance training information for warning forecasters.

Eleven hail-producing storm events were analyzed. The events chosen had geographic diversity across the United States, including both warm and cool seasons. For each individual hail report, values of 17 different hail diagnostic parameters were recorded. Each attribute was compared to ground truth reports and then statistically analyzed. Statistical analyses included the calculation of various correlation coefficients and calculation of probability of detection, false alarm rate, critical success index, and the Heidke skill score for varying forecast decision thresholds, as well as different severe hail criteria. Results indicated that the new high-resolution hail diagnostic parameters outperformed the legacy hail diagnostic parameters. Suggestions for future work to complete the development of NWS Hail Warning Guidance are offered.

Information about the Author:

During the summer of 2005, Michelle participated in the National Weather Center Research Experience for Undergraduates (NWC REU) in Norman, OK. While taking part in the NWC REU, she was able to investigate which parameters work best in helping weather forecasters predict the probability and estimated size of hail.

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The Crucible: Makeup Design

Nick Heggstad

Departmental Affiliation: Theatre,

Last semester I was offered the job of creating makeup designs for the Theatre Department's production of *The Crucible*. Though I had designed makeup before, this was a new challenge, as there were over 20 actors who I would have to design for. Because I was also in the cast, I was able to watch as characters developed, and this greatly helped as I created the designs. A lot of my work was also done with the help of Professor Ann Kessler, who was designing the costumes for the production.

Information about the Author:

Nick Heggstad, a junior theatre major, is currently studying theatre in Chicago and is the production intern for Strawdog Theatre Company's production of Sam Shepard's *Tooth of Crime* (Second Dance). Acting credits include: *The Cradle will Rock*, *Dido and Aeneas*, *Private lives*, *Little Bear*, and *Keeping Up*. Technical credits include: *The Crucible*, *Anna Karenina*, *Becket Works*, *Riches*, and *Accidental Rapture*, for which he received an American College Theatre Festival Award for Excellence in Stage Management.

Faculty Sponsor: Ann Kessler

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The Effects of Task Complexity and Anxiety on Time Estimation

Megan Hoffman, Jessica Masterson, Jenny Siebert

Departmental Affiliation: Psychology,

College of Arts and Sciences

Previous research has shown a relationship between task complexity and time perception, as well as between anxiety levels and time perception. This single factor independent measure design aims to describe how both task complexity and anxiety affect time perception. Twenty-five participants (18 females and 7 males) were divided into 3 groups; each group was given a math exercise of differing complexity, with complexity as the independent variable. Upon completing the exercises, participants were asked to estimate how much time they spent on the exercises; this estimation was the dependent variable. There was a marginally significant difference in time estimation between the different levels of complexity.

Participants were also given a questionnaire to determine levels of math anxiety, test anxiety, and state anxiety. The relationships between anxiety levels and time estimation were not significant.

Information about the Authors:

Megan Hoffman is a sophomore psychology major from Fort Wayne, IN. Jessica Masterson is a sophomore psychology major from Valparaiso, IN. Jenny Siebert is a senior psychology major from St. Louis, MO. The authors implemented this research project as part of Dr. Winquist's Research Methods class. Their research is loosely based on the well-known saying "time flies when you're having fun." Instead of studying the relationship between fun and time perception, however, they studied the relationship between the complexity of math-related tasks and anxiety felt towards these tasks with time perception.

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Ted Hopkins, Josh Vredevoogd

Departmental Affiliation: Physics,
College of Arts and Sciences

The Endcap ElectroMagnetic Calorimeter (EEMC), part of the Solenoid Tracker at the Relativistic (Heavy Ion Collider), has been plagued with background radiation from the time of its commission. The purpose of our project was to find the source of this background in order for shielding to be constructed in the best location to block the background. Our results confirmed experts' suspicions as to the source of the background. Shielding based in part on our results was installed in August of 2005. Recent data from the STAR detector indicates that shielding has been highly effective in increasing the purity of the data.

Information about the Authors:

Ted Hopkins and Josh Vredevoogd are junior physics majors at Valparaiso University. Ted is from Jefferson City, MO, while Josh hails from Waukeegon, MI. Our research was performed the summer of 2005.

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The Outcome of Emergency Planning by Using Special Event Planning, in Accordance with Situational Crisis Communication in Public Relations

Brynn Horne, Jesse Gerhardt

Departmental Affiliation: Communication,
College of Arts and Sciences

A survey of organizations after 911 indicated only 50 percent had a crisis plan. A CMP (crisis management plan) is described as a proactive approach to identifying problems with the intent to provide earlier warnings about impending crises or a plan for damage control. The long-term goal is to find improvements to avoid potential harm. The effort is to create opportunities to improve and develop relationships. Organizations do not have various crises plans for different situations, and do not understand the importance of informing the public when a crisis occurs. Many organizations do not look at all aspects of situations, good or bad. Organizations that have numerous crises plans, especially during special events, will handle emergencies more efficiently and inform the public, ensuring they will rectify the problem, unlike organizations that do not plan ahead for such possible problems. Researchers will conduct surveys, interviews with employees and event planners, and review case studies of other emergency planning of special events to prove this concept. The public appreciate being involved, and may even endeavor to help the cause. In the future, all organizations will need to have crisis communication plans for various situations and be prepared for all crises.

Information about the Authors:

Brynn, a freshman public relations major, is interested in special events and the best way to use them in all aspects of public relations. She had a summer internship with the US Bank Championship (PGA golf tournament in Wisconsin). Jesse has taken numerous public relations classes, is a VISA client and has an

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internship at the Chicago Hostel. In the future, she would like to work at an agency on long-term campaigns and/or event planning.

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Immigration in France and Germany: A Comparative Study of History, Economics and Political Trends

Helen Huggins

Departmental Affiliation: IECA, College of Arts and Sciences

With rioting in Paris and high European unemployment, immigration has become a visible and important topic. This research briefly analyzes the successes and failures of immigration policies in France and Germany. Facing similar problems, these countries have reacted to them differently. Colored immigrants have remained largely shut out from German society, finding it difficult to pass unnoticed and often marrying endogamously. France is simultaneously dealing with obvious racial tensions. A country that prided itself on integration without racism now faces an increasingly racist and unintegrated society. German citizenship laws have made naturalization nearly impossible, leading to third-generation foreigners.

During times of economic hardship, immigration tends to be a scapegoat, with both the media and politicians insisting that immigrants are taking away natives' jobs and have a higher rate of criminality, increasing immigrants' barriers to integration. Both countries need to do more to improve the status of foreigners within their countries and combat xenophobia. How successful have these countries been with their policies? What failures have they encountered? The developed world will be watching these nations as they increasingly consider immigration as a means of population replacement and try to gauge the problems it might bring.

Information about the Author:

Helen is a senior IECA/German major with a West European focus. She was drawn to this research during her year in Germany from personal encounters with immigration policies. She will continue her education at the University of Birmingham, England, in fall 2006, where she will study for a PhD in Russian and East European Studies. She loves traveling and languages, and will probably pursue an academic career.

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Free Market Morality: Jean-Paul Sartre and the Economics of Existentialism

Daniel Jarratt

Departmental Affiliation: Christ College

Americans understand consumerism. The United States' powerful market-driven economy is based on an assessment of the worth of our treasure, time, and talent. But Americans place value on more than material items: we also make value judgments on ethical choices regarding life decisions from marijuana use to abortions. What makes the things in our lives so valuable, and what can be sacrificed for a greater good? Philosophers such as Jean-Paul Sartre and economists like Adam Smith have advanced several important theses on the nature of valuation, though always restricted to their chosen field. This presentation will

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offer groundbreaking insights into a new environment of ethical supply and demand and create a new theory of free-market morality. It examines critical issues, such as whether actions have a priori worth, the plausibility and necessity of arbitrary value judgments, and an economic-existentialist method that most humans apply without realization. Illustrated with charts and graphs, this project demonstrates why microeconomic theory is pivotal in the study of ethical choices, and contends that the process of American value selection is no different with morals than it is with motor vehicles.

Information about the Author:

Through his studies in philosophy, history and theology, Daniel Jarratt has often come across normative ethical systems that tell people the right course of action. He wonders, however, why people don't always follow their morals, and why many times there isn't always a best solution to a problem. Applying his work in Christ College and the departments of political science and theology, Mr. Jarratt discovers important and surprising decision-making methods that we all share.

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Knowledge and Attitudes Concerning Social Work at Valparaiso University

Gina Leon, Kim Sawusch

Departmental Affiliation: Social Work,

College of Arts and Sciences

The goal of this paper is to show the knowledge and attitudes of students at Valparaiso University towards social work and the Social Work Department at Valparaiso University. In particular, this study was designed to discover: Do Valparaiso University students have knowledge and positive attitudes of social work and the VU Social Work Department? This information is relevant to VU's Social Work Department to make decisions about what education is needed and ways to encourage positive attitudes. Because the study is specific to Valparaiso University's campus, the questionnaire used was designed specifically for this student population. The sampling of students was taken from the four colleges at Valparaiso University: the College of Arts and Sciences, the College of Business, the College of Engineering, and the College of Nursing. Specific classes were targeted in order to attain a sample that was representative of the student body.

The expected findings are that there will be a difference of opinion between those students enrolled in the College of Arts and Sciences and other colleges. This difference could be because there is a greater likelihood of students in the College of Arts and Sciences exposed to social work and the Social Work Department.

Information about the Authors:

Gina Leon is a senior theology/youth education and family ministry major with a social work minor. She is originally from San Jose, CA. Gina transferred to Valparaiso University in Spring 2004. For the past year and a half, Gina has been working in the Social Work Department conducting research for Dr. Ringenberg. Kim Sawusch is a senior social work major with a theology minor. She is originally from Schaumburg, IL. Kim plans to attend graduate school next year to pursue her master's in social work. Due to Gina and Kim's involvement with the Social

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Work Department, they have become aware of the need to find out the campus's knowledge of social work and the Social Work Department.

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Public Relations Role in Up and Coming Alternative Transportation Fuel Campaigns

Katie Lindahl, Tuwairesh ALAmeri

Departmental Affiliation: Public Relations,
College of Arts and Sciences

There has been a growing outrage for several years now in American society with the rise of gas prices. Even with the growing upset, though, it seems as though people are not willing to do anything about it. Gas-guzzling SUV's are still extremely popular purchases. Car companies have started making efforts to appease the upset by making eco-friendly cars, and yet American consumers are still reluctant to buy these automobiles. Recently, the role of PR has been strongly utilized as a push for these cars, most notably GM's "Live Green Go Yellow," and Ford's "It isn't easy being green." These new campaigns with their catchy slogans are trying a different approach to target new audiences. Will these campaigns make a significant impact in the sale of these cars? The Diffusion Theory was applied in this study. Research was gathered through questionnaires that surveyed a variety of drivers' ages about their beliefs and attitudes towards these new economical cars, literature from different car manufacturers, and an in-depth study of the new campaigns, their tactics, and recent sale numbers. Research indicated that these campaigns are helping increase sales. Constant PR efforts are necessary, though, if a continued increase in sales is desired.

Information about the Authors:

Katie Lindahl is a sophomore public relations major from West Chicago, IL. She is currently a member of PRSSA and Spark PR as well as Panhellenic delegate for Kappa Kappa Gamma sorority. Katie has a background in nonprofit and agriculture, which is how she became interested in this project. Tuwairesh ALAmeri is from United Arab Emirates. He is a junior with an economics major and a public relations minor. Tuwairesh is interested in international public relations, concentrating in corporate or agency.

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Public Relations and Special Events: Integrating Strategic Thinking and Tactics for Success

Lindsay Looker, Patrick Millian

Departmental Affiliation: Public Relations,
College of Arts and Sciences

Special events are often the venue for promoting an organization or a company's name (Seitel, 2006). With the great emphasis on special events, however, there are issues. The amount of resources, the time, and the costs involved may bring some concerns about the value of these events. Furthermore, the strategies and

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tactics utilized need to be strong and well executed. Those in the field of special events must practice for five years before becoming certified as an event planner. The profession is a serious endeavor and the professionalism increases each year. This study examines the key characteristics needed to be a quality event planner. By interviewing public relations professionals involved in event planning, the results indicated a high-level of expertise in the field. The findings also suggest professional public relations training is needed beyond the usual undergraduate experience.

Information about the Authors:

Lindsay Looker is a freshman public relations major in advanced public relations. Patrick Millian is a sophomore public relations major, having completed an internship and three semesters of communications classes.

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Pd(0)-Catalyzed [3+2] and [4+3] Cycloadditions Involving Novel Epoxide and Aziridine Containing Trimethylenemethane Precursors

Ariana Mankerian

Departmental Affiliation: Chemistry, College of Arts and Sciences

Chemically synthesized natural products and other synthetic products are essential in society because of their medicinal and other practical values. Palladium catalyzed ring forming reactions are an important synthetic technique because they provide efficient and predictable ring formations, which are foundational structures within synthetic products. Several synthetic strategies are being investigated in an effort to generate novel epoxide and aziridine precursors for palladium catalyzed trimethylenemethane (TMM) cycloadditions. These precursors would provide more highly functionalized ring structures in comparison to products formed using existing TMM precursors. Intermediate compounds have been produced using the addition of a Grignard reagent to an alkene or alkyne, the addition of an amine to an aldehyde, and PCC oxidation. Simmons-Smith type chemistry was also explored in the formation of both the epoxide and aziridine functional groups. The results were analyzed using various instrumental methods, including Nuclear Magnetic Resonance spectroscopy and Gas Chromatography-Mass Spectrometry. Once the TMM precursor is formed, it will then be exposed to palladium catalysts to determine whether they undergo TMM cycloaddition reactions. Upon cycloaddition, the new ring structure has potential to be used as part of a natural product or other synthetic product that has a more complex structure.

Information about the Author:

Ariana Mankerian is a junior chemistry major from Marshall, MI. She is the vice-president of the chemistry club and is interested in synthetic organic chemistry. She plans to attend graduate school in the field of organic chemistry.

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New Light Curves of Four Eclipsing Binary Star Systems

Jeff Massura

Student researchers made CCD observations of four binary star systems with four filters over the past two summers at the Valparaiso University Observatory.

Preliminary light curves were obtained for all four; time periods of these ranged from 7 to 48 days. Two showed total eclipses of the hotter star by the cooler companion. A preliminary model of the best-observed system gives a good fit to the observed light curves. This model indicates a difference in temperature of 4400 K between the two stars, with the cooler star twice the size of the hotter one.

Further observations and modeling will be carried out to complete the analyses and yield absolute sizes and masses of the eight stars. This project advances the fundamental study of the properties of stars. This research was supported by funds from the Indiana Space Grant Consortium.

Information about the Author:

Jeff is currently in his junior year at Valparaiso University. He is studying to become a high school physics teacher and has been actively involved in the astronomy program. He was a student research assistant in astronomy during the summers of 2004 and 2005. During the school year, he helps run the observatory for astronomy students, special groups, and the general public.

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The Effects of the Norm of Reciprocity on Prosocial and Antisocial Requests

Andrea Deanna Mata

Departmental Affiliation: Psychology,
College of Arts and Sciences

The purpose of this experiment is to test the strength of the norm of reciprocity by comparing the effects of the norm on both prosocial and antisocial requests.

Thirty-nine general psychology laboratory students at Valparaiso University participated in this experiment. Participants in the experimental condition received a favor, while the control group did not receive a favor. The participants were then asked to sign a petition dealing with either a prosocial or an antisocial campus issue. The findings showed no significant differences between the groups.

This experiment shows the need for further research to be conducted in order to better understand the relationship between the norm of reciprocity and antisocial behaviors.

Information about the Author:

Andrea Mata is a senior psychology major who conducted this experiment as an honors thesis. She became interested in the topic of antisocial behavior after a Chicago internship dealing with antisocial and aggressive children. The purpose of the experiment was to give more insight to antisocial behavior and the role that the norm of reciprocity might play in such behavior.

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Marketing, Public Relations, and Advertising and the Effects on Campus

Taneta McCaw, Matt Hensley

College of Arts and Sciences

Marketing, public relations, and advertising (integrated communications) affect campus events people attend. Men's basketball obtains the highest attendance of students than any other sporting and cultural events. People would rather go to a game than learn about something they aren't educated on. Do people know about all of the events happening for the day? Are students influenced by friends or is it lack of interest? The diffusion theory will answer these questions. Surveys, questionnaires, and interviews will also be used to answer these questions. We conducted 20 surveys, questionnaires, and interviews from students and 25 surveys of faculty and staff. Our findings have led us to conclude:

- 1) People do not want to pay money.
- 2) People do not have money for all of the events they want to attend. If meal cards could be applied, it would be more beneficial.
- 3) People are not informed of events until it is too late.

People attend a free event rather than attend a cultural event where they can eat and partake in a person's culture. We have an opportunity that a lot of students do not; with better integrated communications, students may attend the cultural events rather than sporting events.

Information about the Authors:

Taneta McCaw is a senior sports management major, liberal arts and public relations minors. She is from Plantsville, CT. She is involved in many organizations and also loves sports. She noticed people do not go to cultural events, but instead attend sporting events. After the Black History Month Dinner had such a low turnout for the year, she was influenced to research why people attend basketball games and not cultural events. Matt Hensley is a senior sports management major with minors in business and communication. He has lived in Valparaiso for the past 18 years and graduated from Valpo High. He has been involved in sports all his life and wants to have a career coaching men's basketball at the collegiate level. He anticipates graduating in summer 2006.

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The Effects of Victims' Attractiveness on Perceptions of Responsibility in a Rape
Aleycia McCullough, India Sneed, Angie Crook, Aaron Humphreys

Departmental Affiliation: Psychology,

College of Arts and Sciences

The effects of victims' attractiveness and gender perceptions of responsibility in rape were examined. Thirty-four participants were asked to read the same article depicting a rape with one of four different pictures. The pictures were chosen from the website hotornot.com, based on average scores that visitors of the website gave to the pictures. Experimenters chose attractive male and female, and unattractive male and female pictures. After reading the article,

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participants completed two questionnaires. One questionnaire assessed how much responsibility they ascribed to the victim for the rape, and the other was a decoy memory test based off the article and had no bearing on the participant's data. This analysis revealed a marginally significant main effect of attractiveness on responsibility $F(1, 30) = 3.72, p = .063$. The more attractive victims ($M = 1.58, SD = .96$) were seen as less responsible for the rape than unattractive victims ($M = 2.40, SD = 1.35$). This analysis also revealed a marginally significant main effect of victims' gender on how traumatizing the rape was $F(1, 30) = 3.45, p = .073$. Females were viewed as being more traumatized by the rape ($M = 6.16, SD = 1.015$) than males ($M = 5.4, SD = 1.18$).

Information about the Authors:

All four of the members who worked on this project were in Research Methods for Psychology class. The interesting thing about this project is that males had never been included in research dealing with attractiveness and perceived responsibility in a rape. So males were added to see if their attractiveness would have an effect on how much responsibility they were perceived to have. In this class, students were able to create their own experiment and under the professor's guidance. Members worked as a great team and learned a lot about the research process. Through this activity the team members learned the strengths and weakness of the study and how to go about research in general. Also, through research and reading of previous studies, team members saw how important research is to our world.

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The Segregation Game with Three Classes

Brett Meyer, Jim Wright, Kim Gross

Departmental Affiliation: Mathematics & Computer Science, College of Arts and Sciences

In his 1998 book, Peyton Young describes the Segregation Game with Two Classes as a model for stable configurations. In his version, an environment is randomly filled by members of two classes, who interact and attempt to move to a stable configuration. Given that each member prefers association with members of its own class, this stable configuration consists of segregated groups and contains no isolated members. We investigate the generalization of this problem when a third class is introduced. Our findings indicate that Young's results hold true unless members of one class show bias between the other two. In rare situations, a member of the class holding the bias may be forced to remain in isolation!

Information about the Authors:

Brett Meyer is a sophomore computer science major and mathematics minor from Ft. Wayne, IN.

Jim Wright is a freshman mathematics major with a complementary major in secondary education from Tinley Park, IL. Kim Gross is a freshman mathematics major with a complementary major in secondary education. Although originally assigned to this project by Dr. Gillman as part of the department's academic undergraduate research program, the authors enjoyed working on the topic and look forward to sharing the findings.

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Understanding Diversity and Public Needs: Increasing Public Advocacy and Participation in

Non-Profit Organizations

Amanda Ming, Erik Wielgos

Departmental Affiliation: Public Relations, College of Arts and Sciences

Through continued effort to understand and move toward more diversified public relations strategies, this study will focus on how to gain greater participation from a diversified public for a specific cause. Not-for-profit organizations will reach more publics and have a better overall public reputation through multidimensional and diversified methods of Public Relations than through use of a single-dimensional method. This study will show that through the use of coorientation theory people will come to better understand the organization and its goals. Also, through internal use of the theory, the NPO will better understand its diversified publics and therefore gain a better perspective of future goals.

Through surveys, interviews, and focus groups this study will assess the needs and wants of a diversified public and come to a better understanding as to what those different publics expect of NPOs. The study will look at what makes people want to participate in certain NPOs and what is currently holding them back for others. It will look at how diversity plays into public perception of NPOs. Finally, it will determine what ways not-for-profits can change their image to one which is all inclusive and appeals to all types of people.

Information about the Authors:

Amanda Ming is a senior public relations and sociology major with an interest in event planning and community relations. She hopes to someday work for corporate public relations in event planning. Erik Wielgos is a junior public relations major with a minor in history. Through Erik's work with VISA, he became interested in diversified publics and is especially interested in non-profit public relations. Through their combined interest in community and non-profit, this project emerged.

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Investigation of Public Relations Strategies in Event Planning

Kiersten Moffatt, Aundrea Holland

Departmental Affiliation: Public Relations,
College of Arts and Sciences

The central idea is to investigate the role of public relations strategies used in event planning. Public relations is linked to event planning and they are always seen together, putting both entities hand in hand. We would like to discover the specific public relations strategies and tactics involved in event planning. What balance of public relations and special event planning is needed to make a successful event?

Does the target audience make a difference? The co-orientation theory will be used in the research, giving insight into perception versus reality in the field of event planning and public relations. Interviews will be conducted with professionals

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in the event planning business, as well as questionnaires and scholarly research on event planning and public relations. We want to find how they balance public relations in event planning and what public relations strategies are used in event planning. Public relations will continue to be a vital role in event planning, and the two will continue to help each other.

Information about the Authors:

Kiersten Moffatt is interested in event planning and how public relations is involved. She is a freshman public relations major. She has been involved with non-profit organizations and has seen event planning first hand. She plans to pursue a career in public relations and event planning. Aundrea Holland is a sophomore public relations major and is interested in event planning and representation. She has volunteered with non-profit organizations and has planned events in the past. She plans to pursue a possible career in representation.

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Winter Olympics Audiences Go Ice Cold: Who Left the Relationships Out of Public Relations?

Karen Morrill, Kyle Wicks

Departmental Affiliation: Communications/ Public Relations, College of Arts and Sciences

Viewership for the winter Torino Olympics is way down, while shows like American Idol and Dancing With the Stars flourish with high ratings. The premise of this study is focused on the lack of prior information to the public about the Olympic athletes, leaving American audiences disconnected from the event. It is critical to build relationships between American audiences and athletes. The hope is to improve the number of Americans viewing the Olympics to keep the Olympics in prime time television slots. By reevaluating public relations between athletes and American audiences, it is hoped that there will be more Olympic support in America. This study interviews Americans and their attitude and viewing habits toward the Olympics. The effort assesses the approaches to better support the upcoming Olympics.

Information about the Authors:

Kyle Wicks is a senior sports management major with a minor in public relations and business. After graduation in May, he plans to work for the AAA Iowa Cubs in stadium operations. This topic was a wonderful collaboration of interests which affect the nation as a whole. Karen Morrill is a sophomore public relations major with a minor in history. She is a founding member of both GAMMA (Greeks Advocating the Mature Management of Alcohol) and SAAFE/Empowerment boards at VU. She plans to graduate in the spring of 2008 and attend graduate school for PR.

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Public Relations and the Role it Played During the Steroid Crisis in Baseball

Kyle Obenauf, Katie Deater

Departmental Affiliation: Public Relations, College of Arts and Sciences

Office of Sponsored and Undergraduate Research - Valparaiso University
Steroid use has created a negative image on major league baseball. Fans do not know who used steroids and then question all accomplishments. This study examines how major league baseball applied public relations to better understand the situation and to provide a means for establishing a better relationship with its publics. The organizations involved in developing and implementing these strategies were interviewed. Especially important was to assess the value of the new testing policy. Other documentation established the steps taken by major league baseball to curb the steroid problem. The results indicate greater credibility has returned to the game of baseball. Hopefully with the new testing policy, steroids will be eliminated from baseball.

Information about the Authors:

Kyle Obenauf is a senior sports management major with business and communication minors. He has interned with Valparaiso University athletics and plays on the Crusader baseball team. What goes on in baseball is of important interest to Kyle. He is currently applying for positions coaching or within the sports organizations. In the future, Kyle plans to coach and work as a director of a YMCA type of program. Katie Deater is a sophomore public relations major, political communication minor. After working with Indiana High Speed Rail last semester, she gained an interest in community relations/relationship building aspects of public relations. This fall Katie will be spending a semester in Washington, DC to gain a better understanding for the world of public relations. In the future she hopes to work in public relations developing community relations through special events for a non-for-profit agency.

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The Role of Community Relations Theory in a Major Corporation's Public Relations Campaign

Britta Olson, Tairyn Grosso

Departmental Affiliation: Communication/Public Relations, College of Arts and Sciences

In our study, we wanted to find out why community members are so opposed to Wal-Mart coming into their community. Most people realize that when Wal-Mart moves in, they take business away from local businesses. However, when other stores, such as Target, move in, people are never as upset, even though they essentially do the same as Wal-Mart. Is there a lack of community relationships between Wal-Mart and the public? What positive views does the city council see when Wal-Mart comes into town?

These questions were answered by studying Wal-Mart's lack of public relations efforts for establishing positive community opinions. Surveys, reading newspapers, talking to council members, and looking at other communities that have opposed Wal-Mart were the methodologies used in this study.

This study proved that lack of a community relations program results in a negative view of a large company that wants to move into a town or make any big decisions that affect community members. Wal-Mart is a prime example of a company that should invest more into a community relations program. To win

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over the community, they should follow the example of Target who is one of their competitors.

Information about the Authors:

Tairyn Grosso's interest in PR arose from the need of public relations in the marketing world. This project is going to bring out her PR knowledge that she has learned through her college education in public relations classes. Britta Olson is a junior public relations major and sociology minor. One of her interests is studying groups of people, and that is why she has chosen to research community relations. She has always had strong feelings about big companies and the bad decisions they make. She is from Galesburg, IL, where Maytag deserted her town recently and left the economy in bad shape. It also left the entire community upset, and so now she sees how important it is to gain a community's trust.

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Public Relations in the Nonprofit Sports Profession

Dan Oppland, Stephanie Dutton

Departmental Affiliation: Public Relations,

College of Arts and Sciences

Elementary and high school coaching is a lot of work and pays much less money than the corporate end of the sports industry. Plus, the nonprofit environment requires the coach to be aware of the public relations efforts that are needed, including ongoing fundraising. The literature stresses that sports public relations is very stressful (Heath 2001). The long hours, low pay, and burnout is well documented. This study examines the role of public relations within a nonprofit environment for those who have chosen the profession of coaching in the school systems. The function of public relations, the preparation for public relations responsibilities, and the relationship with any public relations professional in the school district are explored. The project will interview coaches to determine their academic and practitioner background in public relations. The attitudes of the coaches toward public relations as part of their job was measured by a semantic differential. These bi-polar scales were developed around the key public relations functions found needed in the coaching environment. Each site with a public relations office in the school system will be contacted to assess the relationship between PR in the school system and the coaching staff. The results indicate a clear split between the younger coaches (more likely to have public relations training) and the older coaches (learned about the need for public relations functions but did not have training). The more recent graduates were likely to have academic work in public relations promotions, fundraising, and public relations research efforts. The future application of this research will involve recommending a public relations school district office that is funded by the school district. Assessing and connecting coaches to a public relations district office or suggesting that such an office is helpful to the sports program will be an outcome that might support the coaching system.

Information about the Authors:

Dan Oppland, as a sports management major, completed an internship for a NAIA school, and PR was a primary focus. He will receive his bachelor's degree in arts

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and sciences with a sports management major, and business administration and public relations minors. When he finishes playing basketball, he would like to be a basketball coach in the public schools. Coaching is a major goal. Stephanie Dutton is a sophomore public relations and political science double major. She is very interested in non-profit organizations because she has done a lot of work and event planning for the American Cancer Society's event, Relay For Life. Her career goal is to work in Washington, D.C. for a head candidate's campaign committee.

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Non-Profit Organizations and Public Relations: How Successful and Effective Events Come Together

Tonya Romin, Kwau Agyeman Kuntu

Departmental Affiliation: Public Relations,
College of Arts and Sciences

Public relations and non-profits work together on many events. Event planning is largely related to the success or failure of a campaign and when non-profits need assistance they turn to public relations. The problem is knowing what will work with publics and what will not promote success. The purpose is to use the relationship management theory to determine what goes into building a relationship between PR and NPOs. Information will come from focus groups and outside publics giving input of what they believe will work and answer the questions: What outside support do they have and how do the most successful events take off from planning? The focus of the study determined how events were planned from previously planned events. It is up to research and focus groups, along with results of previous events, to determine what goes into the event and how to make NPO events and PR relationships stronger. It is likely that the practitioner and organization base the relationships on mutual interest. This information creates stronger relationships between the two groups as well as the media.

Information about the Authors:

Planning events has always been an interest for Valparaiso University sophomore Tonya Romin. Her public relations major has given her experience from public relations classes with the main focus on case studies of PR and community relations. In the future, she hopes to have a career planning events and working with non-profits to gain more support and recognition so that they can develop on their own and be successful in their goals. Kwau Agyeman Kuntu is a public relations major and serves as the vice president of the Board of Lutheran Youth Organization for the ELCA. He is interested in nonprofit organizations, especially the networks that are needed for success. In particular, he is interested in helping youth in the church gain a sense of belonging.

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Corporations and the Need to Reinvent: Redefining Images through Public Relations

Kathryn Sass, Hayley Ross

The motivations and strategies behind corporations' efforts to rebrand is of great interest to those who are working in public relations. Why do corporations reinvent themselves in order to sustain themselves in their industry? What does a massive image restoration/redefinition process do for the organization and society? (Heath, 2001) Much research and development is given to understanding key audiences, especially in redefining a corporation's image. In this study, our project team will focus on the diffusion of innovations theory to follow the process of corporate image change. This focus describes the relationship between an organization and its publics. By researching suitable publics on their opinion about corporate imaging, it was established the process has various levels of awareness. Our study suggests it may not be so easy to change an organization's image if the "actions" are not aligned with the "new image." The results suggest that society is more questioning about what corporate organizations do and there may be some better ways of assuring survival than by rebranding.

Information about the Authors:

Hayley Ross is a junior sports management major with a pre-law concentration and a public relations minor. She has spent time working with the

Valparaiso University Offices of Institutional

Advancement and Alumni Relations. Hayley's ultimate career goals lie in the field of sports, working in an agency setting. Kate Sass is a senior public relations and Spanish double major. She has worked for United Way of Porter County as a PR intern and with Hawthorne Credit Union as an HR intern. After graduation, she hopes to find a job with a corporation or PR agency.

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Yellow-Bellied Sapsucker (*Sphyrapicus varius*) Feeding Preferences for *Carya Ovata* in Relation to Species Diversity in Northwest Indiana Woods

Vanessa Schwoegler, Michelle Lute

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College of Arts and Sciences

In this study, we examined how the diversity of trees in forest patches in Northwest Indiana may influence the outcome of a plant animal interaction. Yellow-bellied sapsuckers (*Sphyrapicus varius*) feed on sap from various trees by drilling lines of vertical and horizontal holes through the bark. It has been noted that sapsuckers prefer to feed on some trees over others as evidenced by the number of old feeding scars riddling certain individuals. Shagbark hickory (*Carya ovata*) is a species commonly used by sapsuckers in Northwest Indiana. In this study, we examined how the use of shagbark hickories by sapsuckers is influenced by the tree diversity surrounding them, in forest patches in Lake, Porter, and LaPorte Counties. We were curious as to whether sapsuckers feed on hickories if certain other, perhaps more preferred, species are not present or if areas with higher diversity, and thus more preferred species, show higher usage of hickories. The results of this study have implications for forest management and restoration ecology as well as helping to better understand the unique feeding behavior of this native woodpecker.

Michelle Lute has lived in Northwest, IN, all her life. She graduated from VU in December 2005 with an environmental science degree and is working now for Save the Dunes Conservation Fund as a stewardship specialist.

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The Relationship Between Self-Focus and Suggestibility

Sarah Severson

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Self-focus is the act of focusing on yourself, your feelings and your personal state. This can have a number of negative effects due to its relationship with depression. Researchers have found that people who are depressed tend to be self-focused, while people who are self-focused tend to be depressed (Mor & Winquist, 2002). This may create a vicious cycle where depression and self-focus feed off each other and cause a person to fall deeper into depression. Valid and reliable measures to determine levels of self-focus are also sorely lacking. The first purpose of this study is to validate a measure of self-focus that was previously developed by the author.

The second purpose of this study is to determine the relationship between self-focus and suggestibility, or attitude change. Attitude change often results from a feeling of cognitive dissonance, which causes anxiety and discontent within a person (Scheier, Carver & Gibbons, 1979). I hypothesize that participants who are self-focused will show a lesser degree of attitude change than participants who are not self-focused. I believe that participants who are self-focused will be more aware of their original opinions and therefore will be less likely to change their opinion.

Information about the Author:

Sarah is a senior psychology major. She is completing this research project for her honors thesis in psychology. Sarah has worked as a research assistant and teaching assistant within the department. After graduation, Sarah will enter the clinical psychology PhD (child track) program at Southern Illinois University.

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Graphical Searching Results

Fred Spreen

Departmental Affiliation: Mathematics and Computer Science, College of Arts and Sciences

Information retrieval applications have grown through time. While original applications enabled knowledgeable users to search thousands of documents, nowadays any untrained web user can search billions of web pages. However, the one aspect of information retrieval applications that has remained relatively unchanged is the result: the user receives a simple ordered list of documents to read. In our experiment, we are attempting graphical representation of

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IR results. The user receives a colored, wordless map of the document collection, where colors and intensities represent the match of the underlying documents to the search terms. The user then clicks on the graphical map to view the desired documents. In this way, we hope to exploit the much greater information-processing capacity of the visual field. Such a map also highlights the structure of the document collection; in our case we are using the Code of Federal Regulations, so that if some chapters of the code are collectively relevant this fact is visible at a glance.

Information about the Author:

Fred is a freshman majoring in computer science who has been programming computers since sixth grade. He has a passing interest in languages which he hopes can someday be integrated with his love for computers.

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A Long-Term Study of Light Variations in Dying Stars

Jason Strains, Lawrence Selvy

Departmental Affiliation: Physics/Astronomy, College of Arts and Sciences

CCD observations were made this past summer of approximately 30 stars that are in a stage of stellar evolution in which they have lost their outer layers and are in the process of becoming white dwarfs

(the so-called proto-planetary nebula stage). This is part of a long-term (11 year) study of brightness variations of these objects. Variations in the brightness and color of each were measured and are

attributed to pulsation in the stars. The brightness variations were searched for periodicity, which was found in some of these, with periods ranging from 45 to 150 days. Almost all showed variations in

brightness. Some have a simple periodic form but many are more complex, with varying amplitudes, multiple periods, or varying periods. These results will be used to derive information on the internal structure of stars in this transient stage near the death of the stars. This research was supported by funds from the Indiana Space Grant Consortium and the National Science Foundation.

Information about the Authors:

Jason Strains is a junior physics major from Park Ridge, IL. Jason plans to attend a graduate program in education after graduation to pursue a career in teaching.

Lawrence Selvy is a sophomore physics major from Las Vegas, NV. After graduation, Lawrence wishes to attend graduate school in physics and perhaps pursue a doctoral degree.

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Local 4 Coloring on Complete Graphs and the Monochromatic Subgraphs that are Produced

Douglas Swanson, Ryan Turner, Jared Erickson

Departmental Affiliation: Mathematics and Computer Sciences, College of Arts and Sciences

A graph consists of dots, called vertices, and lines, called edges. We color the edges of a graph and then we look at the monochromatic subgraphs, i.e., a part of a graph where the same color edges connect the vertices. We color complete graphs (in which each pair of vertices is connected by an edge) with the restriction that any vertex can have at most four colors connected to it. With this restriction, we have tried to minimize the largest monochromatic subgraph. This search has also led us to study colorings on bipartite and multipartite graphs. Our initial results suggest that, for the complete graphs, the projective plane of order 13 can be used to find the best coloring.

Information about the Authors:

Douglas Swanson is a senior math major from Oak Park, IL. After graduation he plans to open his own business. Ryan Turner is a junior math and secondary education major from Saint Louis, MO. He likes Cardinals baseball. Jared Erickson is a freshman math major and chemistry minor from Eagan, MN. He also plays in the jazz band.

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Public Relations: The Role of Community Relations in Public Perception

Leigh Vanarsdall, Kevin York

Departmental Affiliation: Public Relations,

College of Arts and Sciences

Community relations are important for a company, and perceptions are a very critical part of CR. However, companies often do not realize the value of community relations and how CR is an essential part of positive business policy.

In most cases, community relations improve the public's perception. This study of cases in public relations outreach through community relations stresses the important of research. Through surveying target audiences and through in-depth interviews, the effort revealed the community relations efforts that were particularly helpful. The results further indicated that organizations that support the community are more likely to succeed. Finally, businesses need to allow the function of community relations to be well supported in public relations departments.

Information about the Authors:

Kevin York is a senior marketing major and public relations minor. His previous experience in the topic area includes strategic and tactical implementation of community relations programs while serving as an intern. His interest in the topic area stems from his business studies of the public opinion of various corporations. Leigh Vanarsdall is a sophomore public relations major and Spanish minor from Indianapolis, IN. Her focus is in the area of non-profit organizations with an internship in an Indianapolis-based community foundation.

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Bed and Britches Etc. (B.A.B.E.) Program Evaluation

Erin Votava, Kelly Bell

Departmental Affiliation: Department of Social Work, College of Arts and Sciences

Office of Sponsored and Undergraduate Research - Valparaiso University
Does the B.A.B.E. program at the Family and Youth Service Bureau encourage families with young children to participate in healthy lifestyle programs?

The Beds and Britches Etc (B.A.B.E.) program is part of the Family and Youth Service in Valparaiso. The purpose of this program is to assist families with children under age five to live healthy lifestyles by rewarding them with coupons redeemable for items. The coupons are provided upon request from various agencies. Success of the B.A.B.E. program is defined by (1) positive attitudes towards the program; (2) how many people utilize the program; (3) customer satisfaction; and, most importantly, (4) changes in healthy lifestyles as observed by coupon vendors. A questionnaire will be administered to B.A.B.E. clients as well as interviews with the agency and program directors of vendors. The purpose of this evaluation is to assess if clients' needs are being met, and if not, offer possible solutions from clients' feedback. This evaluation will be important by assessing if the benefits of the program outweigh the costs. Our sample will consist of clients of the B.A.B.E. program as well as coupon administrators. We wish to gain knowledge regarding satisfaction with the program.

Information about the Authors:

- Kelly Bell is a junior social work major from Hammond, IN. She is a resident assistant of Lankenau Hall. She also is the internal coordinator for Union Board, the MLK Day co-chair for the Student Social Work Organization, and a member of National Residence Hall Honorary. Erin Votava is a junior social work major from Naperville, IL. She is the leadership and ritual chair for the Kappa Delta sorority. She is the series programming chair for Union Board, the MLK Day co-chair for the Student Social Work Organization, a member of Engineers without Borders, and a member of the Union Groundbreaking Committee. Kelly and Erin are evaluating the B.A.B.E. program for a social work research class. They wanted to do research that could benefit the community, and Erin had experience working with the FYSB previously.

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Effect of Humor and Self-Reference Encoding on Memory Performance

Allison Whitesell, Kristi Dixon, Katie Siepman

Departmental Affiliation: Psychology,

College of Arts and Sciences

Previous research has shown that people remember humorous material better than non-humorous material. Research has also shown that people remember material related to themselves better than neutral material.

The current study examines the joint effects of humor and self-reference on memory. Humorous and non-humorous slides were presented for fifteen seconds, and each group rated the stimuli on either humor or personal reference. After all stimuli were presented, a three-minute distracter task was completed. Participants were then asked to recall as many slides as possible.

A 3x2 mixed factorial ANOVA will be used to analyze recall. The Within Subjects variable was slide type. All participants saw either a humorous or non-humorous version of matched stimuli consisting of a picture and a phrase. The Between

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Subjects variable was instructions. The degree to which participants related the material to themselves was manipulated. Some participants rated stimuli for humor, some related stimuli to themselves and rated humor, and a final group related stimuli to themselves and rated personal relevance of the stimuli.

We expect that instructions emphasizing self-reference will reduce the memory advantage for humorous material. The instructions will cause participants to encode the material differently thereby reducing the humor effect.

Information about the Authors:

Allison Whitesell is a junior psychology major in her second semester working on the project. Kristi Dixon is a senior psychology student in her first semester with the project. Katie Siepman is a senior psychology and public relations major in her first semester working on the project.

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Public Affairs and Political Marketing: How the Two Disciplines are Linked Together

Kevin York

Departmental Affiliation: Joint project between College of Business Administration's Marketing Department and College of Arts & Sciences' Dept. of Communication, College of Business Administration

The purpose of the research is to determine if young voters feel there is a link between public affairs and political marketing. Can public affairs decisions made by elected officials affect how young voters feel about these incumbents in upcoming elections to the point that they will vote the incumbents out of office? In turn, can these feelings be changed by any amount of political marketing done by the incumbents? The research will also explore young voter opinion on if and how elected officials can use political marketing when facing a public affairs issue. The research utilized surveys and focus groups to assess attitudes and opinions on key related issues.

The research indicated that young voters do see a link between public affairs and political marketing. The actions of elected officials influence how young voters feel regarding incumbents in elections. If the issue is large enough, no amount of political marketing can change the young voters' feelings regarding incumbents.

Information about the Author:

Kevin York is a senior marketing major and public relations minor. He became interested in this topic after researching Indiana Governor Mitch Daniels' Major Moves campaign and his idea of leasing the Indiana 80/90 Toll Road. Many voters are opposed to the idea, feeling their elected officials are not representing their concerns, and are planning to vote against these incumbents in upcoming elections.

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